

Application No.: 10/646,994  
Response

**R E M A R K S**

Reconsideration of the application in view of the above amendments and the following remarks is respectfully requested. No claims are currently being amended, canceled or added. Therefore, claims 1-28 remain pending in the application.

**Additional Supplemental IDS Filed**

Applicants have submitted herewith another Supplemental Information Disclosure Statement for this application. Applicants request that the Examiner consider the references listed therein and return a copy of the signed Form PTO-1449 with the next paper for this application. An RCE is also being submitted herewith so that the IDS is properly filed.

**Extension of Time**

A Petition and Fee for a three-month extension of time is submitted herewith to extend the period for response to August 25, 2005.

**Objections to the Specification**

The Examiner objected to the amendment filed 11/24/2004 under 35 U.S.C. 132 because it allegedly introduces new matter into the disclosure. Applicants respectfully traverse this objection.

The amendment filed 11/24/2004 does not introduce new matter into the disclosure because as was explained in that amendment all of the added material was copied from a U.S. patent application that was incorporated by reference into the present application.

Specifically, Section 608.01(p)I.A. of the Manual of Patent Examining Procedure (MPEP) states:

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"An application as filed must be complete in itself in order to comply with 35 U.S.C. 112. Material nevertheless may be incorporated by reference, Ex parte \*>Schwarze<, 151 USPQ 426 (Bd. Ape. 1966). An application for a patent when filed may incorporate 'essential material' by reference to (1) a U.S. patent, (2) a U.S. patent application publication, or (3) a pending U.S. application, subject to the conditions set forth below.

'Essential material' is defined as that which is necessary to (1) describe the claimed invention, (2) provide an enabling disclosure of the claimed invention, or (3) describe the best mode ( 35 U.S.C. 112). In any application which is to issue as a U.S. patent, essential material may not be incorporated by reference to (1) patents or applications published by foreign countries or a regional patent office, (2) non-patent publications, (3) a U.S. patent or application which itself incorporates 'essential material' by reference, or (4) a foreign application."

(MPEP § 608.01(p)I.A.) (emphasis added).

Therefore, as stated in the MPEP an application may incorporate material by reference to another pending U.S. application.

As was clearly explained in the amendment filed 11/24/2004, the present application, as well as its parent application, incorporate by reference U.S. Application No. 09/065,685, filed April 24, 1998, which issued as U.S. Patent No. 6,239,888 (the '888 patent). New FIGS. 10 and 11 are supported by FIGS. 1 and 4 of the '888 patent. Furthermore, the three new paragraphs are supported by col. 6, lines 23-37, col. 7, lines 16-24, and col. 9, lines 3-26 of the '888 patent.

Therefore, the addition of new FIGS. 10 and 11 and the three new paragraphs is fully supported by the application as filed and therefore does not constitute new matter. As such,

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the objection to the specification must be withdrawn.

Claim Rejections under 35 U.S.C. § 112

The Examiner rejected claims 2-4, 7-17, 19-22 and 24-28 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicants respectfully traverse these rejections.

The Examiner asserts that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. However, at the time the present application was filed, Applicants submitted a paper entitled "IDENTIFICATION OF THE PENDING APPLICATION OF ANOTHER PURSUANT TO 37 C.F.R. § 1.604(b)". In that paper Applicants included a table that explained where the terms of each claim are supported in the present application.

Applicants have reproduced the relevant portions of the table below for the claims that the Examiner rejected. The table indicates where the subject matter of each claim is described in the specification of the present application. The table identifies each claim number of the present application, the text of each claim, and how the terms of each claim apply to the disclosure of the present application:

| <b>No. of Claim<br/>in Present<br/>App.</b> | <b>Text of Claim</b>   | <b>Example Citations to<br/>Disclosure of Present<br/>App.</b>   |
|---|--|--|
| 2   | A node incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 1, wherein the controller is configured as a binary switch such that the data is transmitted exclusively through either one of the laser portion and the radio frequency portion.   | Page 18, line 18 to page 19, line 13; page 29, line 21 to page 30, line 8.   |
| 3   | A node incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 2, wherein the controller is configured to receive environmental information, and wherein the portions of the data to be transmitted through the laser portion and the radio frequency portion are adjusted by the controller based on the environmental information. | Page 23, line 34 to page 24, line 23;<br>Page 23, line 34 to page 24, line 23; page 4, line 33 to page 6, line 17; page 7, lines 5-30; page 10, line 17 to page 11, line 23; page 28, lines 15-33. |
| 4   | A node incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 1, wherein the controller is configured to receive environmental information, and wherein the portions of the data to be transmitted through the laser portion and the radio frequency portion are adjusted by the controller based on the environmental information. | Page 23, line 34 to page 24, line 23;<br>Page 23, line 34 to page 24, line 23; page 4, line 33 to page 6, line 17; page 7, lines 5-30; page 10, line 17 to page 11, line 23; page 28, lines 15-33. |
| 7   | A node incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 6, wherein the controller is configured to receive environmental information, and wherein the portions of the data to be transmitted through the laser portion and the radio frequency portion are adjusted by the controller based on the environmental information. | Page 23, line 34 to page 24, line 23;<br>Page 23, line 34 to page 24, line 23; page 4, line 33 to page 6, line 17; page 7, lines 5-30; page 10, line 17 to page 11, line 23; page 28, lines 15-33. |

| <b>No. of Claim<br/>in Present<br/>App.</b> | <b>Text of Claim</b>  | <b>Example Citations to<br/>Disclosure of Present<br/>App.</b>   |
|---|---|--|
| 8   | A node incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 5, wherein the controller is configured as a binary switch such that the data is transmitted exclusively through either one of the laser portion and the radio frequency portion.  | Page 18, line 18 to page 19, line 13; page 29, line 21 to page 30, line 8.   |
| 9   | A node incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 5, wherein the controller is configured to receive environmental information, and wherein the portions of the data to be transmitted through the laser portion and the radio frequency portion are adjusted by the controller based on the environmental information.  | Page 23, line 34 to page 24, line 23;<br>Page 23, line 34 to page 24, line 23; page 4, line 33 to page 6, line 17; page 7, lines 5-30; page 10, line 17 to page 11, line 23; page 28, lines 15-33. |
| 10  | A node incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 5, wherein the laser portion and the radio frequency portion have transmit and receive strengths, and wherein the controller is configured to monitor the transmit and receive strengths, wherein the portions of the data to be transmitted through the laser portion and the radio frequency portion are adjusted by the controller based on their transmit and receive strengths. | Page 11, line 5 to page 12, line 24; page 20, lines 9-32; page 25, lines 14-35.<br>Page 11, line 5 to page 12, line 24.  |
| 11  | A node incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 5, wherein the controller includes a plurality of latches and a logic device, wherein the plurality of latches and the logic device operate to provide adjustment levels for the portions of the data to be transmitted through the laser portion and the radio frequency portion.   | Figs. 3, 5 and 6, CIUs 62 and 70 and TIUs 60 and 68.<br>Page 18, line 18 to page 19, line 13; page 29, line 21 to page 30, line 8.   |

| <b>No. of Claim<br/>in Present<br/>App.</b> | <b>Text of Claim</b>   | <b>Example Citations to<br/>Disclosure of Present<br/>App.</b>   |
|---|--|--|
| 12  | A node incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 11, wherein the laser portion and the radio frequency portion have aggregate transmit and receive strengths, and wherein the controller is configured to monitor the aggregate transmit and receive strengths, wherein the portions of the data to be transmitted through the laser portion and the radio frequency portion are adjusted by the controller based on their transmit and receive strengths. | Page 11, line 5 to page 12, line 24; page 20, lines 9-32; page 25, lines 14-35.<br><br>Page 11, line 5 to page 12, line 24.  |
| 13  | A node incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 11, wherein the laser portion and the radio frequency portion are configured to transmit in multiple channels.  | Page 19, line 33 to page 20, line 32; and<br>Figs. 2 and 8-11, col. 7, line 57 to col. 8, line 29 of U.S. Pat. No. 6,239,888, which issued from U.S. App. No. 09/065,685, filed 4/24/98, which is incorporated into the present app. by reference, as well as the parent app. hereto.  |
| 14  | A node incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 13, wherein the each channel has a transmit and receive strength, and wherein the controller is configured to monitor the transmit and receive strength of each channel, wherein the channels of the data to be transmitted through the laser portion and the radio frequency portion are determined by the controller based on their transmit and receive strengths.                                     | Page 11, line 5 to page 12, line 24; page 20, lines 9-32; page 25, lines 14-35.<br><br>Page 11, line 5 to page 12, line 24.<br><br>Page 19, line 33 to page 20, line 32; and<br>Figs. 2 and 8-11, col. 7, line 57 to col. 8, line 29 of U.S. Pat. No. 6,239,888, which issued from U.S. App. No. 09/065,685, filed 4/24/98, which is incorporated into the present app. by reference, as well as the parent app. hereto. |

| <b>No. of Claim<br/>in Present<br/>App.</b> | <b>Text of Claim</b>   | <b>Example Citations to<br/>Disclosure of Present<br/>App.</b>   |
|---|--|--|
| 15  | A node incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 5, wherein the at least one laser portion and the at least one radio frequency portion are configured to transmit and receive in tandem, whereby the node may be configured to provide a hybrid serial link to permit tailored radio frequency or optical network connections.                              | Page 9, line 29 to page 10, line 16; and<br><br>Figs. 1 and 4, col. 7, lines 16-24, and col. 9, lines 3-26 of U.S. Pat. No. 6,239,888, which issued from U.S. App. No. 09/065,685, filed 4/24/98, which is incorporated into the present app. by reference, as well as the parent app. hereto. |
| 16  | A node incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 15, wherein the laser portion and the radio frequency portion are configured to transmit and receive in multiple channels.  | Page 19, line 33 to page 20, line 32; and<br><br>Figs. 2 and 8-11, col. 7, line 57 to col. 8, line 29 of U.S. Pat. No. 6,239,888, which issued from U.S. App. No. 09/065,685, filed 4/24/98, which is incorporated into the present app. by reference, as well as the parent app. hereto.      |
| 17  | A node incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 15, wherein an optical reflector is used to deflect transmissions from the laser portion in order to work around fixed objects in the environment, whereby the node may be used to extend a network and the laser portion can maintain communication without the need for a strict line-of-site connection. | Figs. 1 and 4, col. 7, lines 16-24, and col. 9, lines 3-26 of U.S. Pat. No. 6,239,888, which issued from U.S. App. No. 09/065,685, filed 4/24/98, which is incorporated into the present app. by reference, as well as the parent app. hereto.   |
| 19  | A network incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 18, wherein the controller of each node is configured as a binary switch such that the data is transmitted exclusively through either one of the laser portion or the radio frequency portion.   | Page 18, line 18 to page 19, line 13; page 29, line 21 to page 30, line 8.   |

| <b>No. of Claim<br/>in Present<br/>App.</b> | <b>Text of Claim</b>   | <b>Example Citations to<br/>Disclosure of Present<br/>App.</b>   |
|---|--|--|
| 20  | A network incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 19, wherein the controller of each node is configured to receive environmental information, and wherein the portions of the data to be transmitted through the laser portion and the radio frequency portion are adjusted by the controller based on the environmental information.  | Page 23, line 34 to page 24, line 23;<br>Page 23, line 34 to page 24, line 23; page 4, line 33 to page 6, line 17; page 7, lines 5-30; page 10, line 17 to page 11, line 23; page 28, lines 15-33.   |
| 21  | A network incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 18, wherein the controller is configured to receive environmental information, and wherein the portions of the data to be transmitted through the laser portion and the radio frequency portion are adjusted by the controller based on the environmental information.   | Page 23, line 34 to page 24, line 23;<br>Page 23, line 34 to page 24, line 23; page 4, line 33 to page 6, line 17; page 7, lines 5-30; page 10, line 17 to page 11, line 23; page 28, lines 15-33.   |
| 22  | A network incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 18, wherein the laser portion and the radio frequency portion of each node have transmit and receive strengths, and wherein the controller is configured to monitor the transmit and receive strengths, wherein the portions of the data to be transmitted through the laser portion and the radio frequency portion are adjusted by the controller based on their transmit and receive strengths. | Page 11, line 5 to page 12, line 24; page 20, lines 9-32; page 25, lines 14-35.<br><br>Page 11, line 5 to page 12, line 24.  |
| 24  | A network incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 18, wherein the at least one laser portion and the at least one radio frequency portion are configured to transmit and receive in tandem, whereby the node may be configured to provide a hybrid serial link to permit tailored radio frequency or optical network connections.  | Page 9, line 29 to page 10, line 16; and<br><br>Figs. 1 and 4, col. 7, lines 16-24, and col. 9, lines 3-26 of U.S. Pat. No. 6,239,888, which issued from U.S. App. No. 09/065,685, filed 4/24/98, which is incorporated into the present app. by reference, as well as the parent app. hereto. |

| <b>No. of Claim<br/>in Present<br/>App.</b> | <b>Text of Claim</b>  | <b>Example Citations to<br/>Disclosure of Present<br/>App.</b>  |
|---|---|---|
| 25  | A network incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 18, wherein at least a portion of the network is configured with a ring topology. | Page 9, line 18 to page 10, line 16; and col. 7, lines 46-56 and Fig. 1 of U.S. Pat. No. 6,239,888, which issued from U.S. App. No. 09/065,685, filed 4/24/98, which is incorporated into the present app. by reference, as well as the parent app. hereto. |
| 26  | A network incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 25, wherein at least a portion of the network is configured as a SONET ring.      | Page 9, line 18 to page 10, line 16; and col. 7, lines 46-56 and Fig. 1 of U.S. Pat. No. 6,239,888, which issued from U.S. App. No. 09/065,685, filed 4/24/98, which is incorporated into the present app. by reference, as well as the parent app. hereto. |
| 27  | A network incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 23, wherein at least a portion of the network is configured with a ring topology. | Page 9, line 18 to page 10, line 16; and col. 7, lines 46-56 and Fig. 1 of U.S. Pat. No. 6,239,888, which issued from U.S. App. No. 09/065,685, filed 4/24/98, which is incorporated into the present app. by reference, as well as the parent app. hereto. |
| 28  | A network incorporating hybrid radio frequency and optical wireless communication links as set forth in claim 27, wherein at least a portion of the network is configured as a SONET ring.      | Page 9, line 18 to page 10, line 16; and col. 7, lines 46-56 and Fig. 1 of U.S. Pat. No. 6,239,888, which issued from U.S. App. No. 09/065,685, filed 4/24/98, which is incorporated into the present app. by reference, as well as the parent app. hereto. |

Applicants submit that the above table indicates where the subject matter of each claim is described in the specification of the present application in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Applicants note that the support for some of the claims is found in U.S. Pat. No. 6,239,888, which issued from U.S. App. No. 09/065,685, filed

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4/24/98, which as discussed above is incorporated into the present application by reference. Applicants request the Examiner to indicate whether or not any of the material incorporated by reference should be copied into the present application.

Therefore, these rejections must be withdrawn.

Double Patenting Claim Rejections

Claims 1, 5, 6, 18 and 23 have been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-38 of U.S. Patent No. 6,763,195 to Willebrand et al. (the parent application hereto). Applicants respectfully traverse these rejections.

Furthermore, claims 1, 5, 6, 18 and 23 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-45 of copending U.S. Application No. 10/840,172 to Willebrand et al. and claims 1-7 (renumbered) of copending U.S. Application No. 09/835,866 to Willebrand. Applicants respectfully traverse these rejections.

Applicants request that all of these rejections be held in abeyance until the rejections under 35 U.S.C. 103 have been overcome so that the final form of the claims can be considered with respect to the double patenting claim rejections.

Claim Rejections under 35 U.S.C. § 103

(1) The Examiner rejected claims 1, 2, 5, 6, 8, 18, 19 and 23 under 35 U.S.C. § 103(a) as being unpatentable over Vollert, Publication No. DE 4433896 C1, in view of Mullaly et al., U.S. Patent No. 6,812,881. Applicants respectfully

traverse these rejections.

The Examiner asserts that it would have been obvious to one having ordinary skill in the art to incorporate a laser portion into the system of Vollert based on Mullaly et al. (See Final Office Action mailed 2/25/05, page 9, lines 8-18). The Examiner states that the motivation for making such a modification is that Mullaly et al. allegedly suggests that using a laser portion has the advantage of providing a light source for transmitting data with narrow spectral width, coherent, and highly directional. (See Final Office Action mailed 2/25/05, page 9, lines 14-18).

However, the Examiner has not shown where Vollert itself teaches the need for a light source for transmitting data with narrow spectral width, coherent, and highly directional. Therefore, Applicants assert that a proper *prima facie* case of obviousness of Applicants' claims has not been established and rejections should be withdrawn.

(2) The Examiner rejected claims 1, 2, 5, 6, 8, 18, 19 and 23 under 35 U.S.C. § 103(a) as being unpatentable over Sato, U.S. Patent No. 4,904,993, in view of Mullaly et al. Applicants respectfully traverse these rejections.

The Examiner asserts that it would have been obvious to one having ordinary skill in the art to incorporate a laser portion into the system of Sato based on Mullaly et al. (See Final Office Action mailed 2/25/05, page 11, lines 3-13). The Examiner states that the motivation for making such a modification is that Mullaly et al. allegedly suggests that using a laser portion has the advantage of providing a light source for transmitting data with narrow spectral width, coherent, and highly directional. (See Final Office Action mailed 2/25/05, page 11, lines 9-13).

However, the Examiner has not shown where Sato itself teaches the need for a light source for transmitting data with narrow spectral width, coherent, and highly directional. Therefore, Applicants assert that a proper *prima facie* case of obviousness of Applicants' claims has not been established and rejections should be withdrawn.

(3) The Examiner rejected claims 1, 2, 5, 6, 8, 18, 19 and 23 under 35 U.S.C. § 103(a) as being unpatentable over Zavrel, U.S. Patent No. 5,585,953, in view of Mullaly et al. Applicants respectfully traverse these rejections.

The Examiner asserts that it would have been obvious to one having ordinary skill in the art to incorporate a laser portion into the system of Zavrel based on Mullaly et al. (See Final Office Action mailed 2/25/05, bottom of page 12 to top of page 13). The Examiner states that the motivation for making such a modification is that Mullaly et al. allegedly suggests that using a laser portion has the advantage of providing a light source for transmitting data with narrow spectral width, coherent, and highly directional. (See Final Office Action mailed 2/25/05, page 13, lines 4-8).

However, the Examiner has not shown where Zavrel itself teaches the need for a light source for transmitting data with narrow spectral width, coherent, and highly directional. Therefore, Applicants assert that a proper *prima facie* case of obviousness of Applicants' claims has not been established and rejections should be withdrawn.

(4) The Examiner rejected claims 1, 2, 5, 6, 8, 18, 19 and 23 under 35 U.S.C. § 103(a) as being unpatentable over Petsko, U.S. Patent No. 5,999,294, in view of Mullaly et al. Applicants respectfully traverse these rejections.

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The Examiner asserts that it would have been obvious to one having ordinary skill in the art to incorporate a laser portion into the system of Petsko based on Mullaly et al. (See Final Office Action mailed 2/25/05, bottom of page 14 to top of page 15). The Examiner states that the motivation for making such a modification is that Mullaly et al. allegedly suggests that using a laser portion has the advantage of providing a light source for transmitting data with narrow spectral width, coherent, and highly directional. (See Final Office Action mailed 2/25/05, bottom of page 14 to top of page 15).

However, the Examiner has not shown where Petsko itself teaches the need for a light source for transmitting data with narrow spectral width, coherent, and highly directional. Therefore, Applicants assert that a proper *prima facie* case of obviousness of Applicants' claims has not been established and rejections should be withdrawn.

Fees Believed to be Due

No extra claims fee are believe to be due.

A Fee is submitted herewith to cover the Petition for a three-month extension of time.

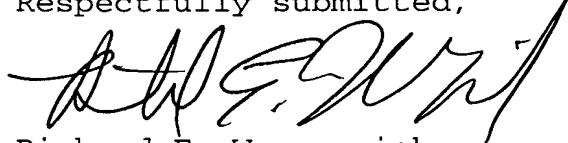
A Fee is submitted herewith to cover the Request for Continued Examination (RCE).

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C O N C L U S I O N

Should there be any outstanding issues that require adverse action with respect to this amendment, it is respectfully requested that the Examiner telephone Richard E. Wawrzyniak at (858)552-1311 so that such issues may be resolved as expeditiously as possible.

Respectfully submitted,



Richard E. Wawrzyniak  
Reg. No. 36,048

Dated 8/22/05

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